

Notice of Allowability

Application No.

09/763,138

Applicant(s)

BECKER ET AL.

Examiner

Laura M Schillinger

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/1/03.
2. ☒ The allowed claim(s) is/are 18, 20-28 and 35-40.
3. ☒ The drawings filed on 20 April 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No. _____.
(b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1 ☒ Notice of References Cited (PTO-892)
3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
5 ☐ Information Disclosure Statements (PTO-1449), Paper No. _____.
7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)
4 ☐ Interview Summary (PTO-413), Paper No. _____.
6 ☒ Examiner's Amendment/Comment
8 ☒ Examiner's Statement of Reasons for Allowance
9 ☐ Other



CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

DETAILED ACTION

This Office Action is in response to the Amendment made on 8/1/03.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Mayer on 11/14/03.

The application has been amended as follows: Cancel claims 29-34.

Allowable Subject Matter

Claims 18, 20-28 and 35-40 are allowed.

The following is an examiner's statement of reasons for allowance:

In reference to claim 18, Collins teaches a device comprising:

A high frequency generator (Fig.1 (31));

A plasma source for generating high frequency electromagnetic alternating field power to be applied to the plasma source with assistance of a high frequency generator (Col.11, lines: 25-40);

A reactor for generating the plasma from reactive particles through the action of the high-frequency alternating filed upon a reactive gas or a reactive gas mixture (Abs., lines: 1-15);

And a first arrangement for producing a periodical change in the high-frequency power applied to the plasma source (Col.4, lines: 55-65).

However Collins ('501) fails to teach wherein the first arrangement includes a digital ramp generator being programmed via a software in the component and an analog ramp generator for controlling the power of the high frequency generator.

Tulk et al ('039) teaches implementing a digital and analog ramp generator to control power for a high frequency generator but does so for a lamp flashing system. Further Tulk fails to teach that the digital ramp generator be programmed via software.

Consequently, even in combination Tulk and Collins fail to teach controlling the power for a high frequency generator by a digital ramp generator programmed via software for plasma etching purposes. Therefore, Applicant's claims are deemed to be allowable over prior art. Claims 24 and 40 also contain this allowable subject matter and are therefore also considered to be allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Application/Control Number: 09/763,138
Art Unit: 2813

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (703) 308-4940. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

LMS

November 13, 2003